

REMARKS

Reconsideration is requested.

Claims 1-35 and 37-40 are pending. Claim 40 has been added and is similar to claim 32 but for the dependence on claim 6. Claim 40, like claim 32, is understood to be directed to non-elected subject matter. Claims 31-35 and 37 have been withdrawn from consideration. Rejoinder and allowance of any claim defining a method of making and/or using a product defined by an allowable claim, at an appropriate time, are requested.

The claims have been amended to advance prosecution and without prejudice.

The Examiner's indicates that claims 3 and 7 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims is acknowledged, with appreciation. See page 5 of the Office Action dated December 3, 2007.

The objections to claims 12, 15, 19, 22, 26 and 30 are believed to be obviated by the above amendments. The Examiner's helpful suggestions are noted, with appreciation. Withdrawal of the objections is requested.

The Section 112, first paragraph "enablement", rejection of claims 17-20, 25-30, 38 and 39 is believed to be obviated by the above amendments. The Examiner's comment that the specification is "enabling for determining resistance to HBV nucleoside analog reverse transcriptase inhibitors (lamivudine) by determining the presence of mutations at codon 180 and/or codon 204 of the reverse transcriptase domain" is noted. See page 2 of the Office action dated December 3, 2007. The

Examiner is requested to appreciate that while the specification describes resistance against lamivudine (see for example page 10, line 7), the specification also describes resistance against other antiviral drugs, such as on page 48 and Example 2, on page 53 wherein a combination of drugs including lamivudine has been described. The claims are submitted to be supported by an enabling disclosure and withdrawal of the Section 112, first paragraph "enablement", rejection is requested.

The Section 112, first paragraph "enablement", rejection of claims 13-16 and 21-24 is believed to be obviated by the above amendment. Withdrawal of the rejection is requested.

The Section 102 rejection of claims 1, 2, 4-6 and 8-12 over Petzold (GenBank Accession No. AJ131956), is believed to be obviated by the above amendments.

The Examiner is understood to believe that the cited art teaches an HBV polynucleic acid (and polypeptide) containing a methionine at codon 180 and a serine at codon 204. See page 5 of the Office Action dated December 3, 2007. However, the applicants believe that the sequence of the cited art contain neither a methionine at codon 180 nor a serine at codon 204. Specifically, the applicants submit that in the sequence on the first page, reproduced below, the well known combination of amino acids YMDD can be found (identified below with the arrow). This can be found in the wild type sequence while the present invention concerns the mutation in codon 204 of M→S, i.e., resulting in the combination YSDD:

/translation="MPLSYQHFRKLLLLDDEAGPLEEELPRLADEGLNRRVAEDLNLG
NLNVSIPTWTHKVGNTGLYSSTVPVFNPFWKTPSFNPNIHLHQDIIKKCEQFVGPLTVN
EKRRQLQIMPARFYPKVTKYLPLDKGIKPYYPENLVNHYFQTRHYLHTLWKAGILYXR
ETTHSASPCGSPYSWEQDLHHGAESFHQQSSGILSRPPVGSLSQSKHRKSRLGLQSQQ
GHLARRQQGRSWSIRAGFHPHTARRPFGVEPSGSGHTTNFASKSASCLHQSPDRKAAYP
AVSTFEKHSSSGHAVEFHNLSPNSARSQSERPVFPWWLQFRSSKPCSDYCLSLIVNL
LEDWGPCEAHGENHIRTPTPTPSRVTTGGVFLVDKNPHNTAESRLVVDFFSQFSRGNRYVS
WPKFAVFNLSLTNLLSSNLSWLSLDVSAAFYHLPLHPAAMPHELLVGSSGLSRYIARL
SSNSRIILNHQGTMPNLDYCSNLYVSLLLLYQTFFGRKLHLYSHPIILGFRKIPMGV
GLSPFLLAQFTSAICSVVRRAPPHCLAFSYMDDVVLGAKSVQHLESLEFTAVTNFLLSL
GIHLNPNKTKRWGYSLNFMGYVIGSYGSLPQEHIIQKIKECFRKLPIINRPIDWKVCQR
IVGLLGFAPFTQCGYPALMPYACIQSKQAFTEFSPTYKAFCLKQYLNLYPVARQRPG
LCQVFADATPTGWGLVMGHQMRGTFSAPLPIHTAELLAACFARSRSGANIIGTDNSV
VLSRKYTSYPWLLGCAANWILRGTSFVYVPSALNPADDPGRRLGLSRPLRLRPFRT
TGRTSLYADSPSPVSHLPDRVHFASPLHVAVRPP"

Moreover, seven (7) codons from the start on the same line as identified above, the sequence of the cited art contains a L at codon 180, which is also present in the wild type sequence (see arrow identification below). The cited art therefore fails to provide a sequence with a mutation for codon 180 from L → M.

/translation="MPLSYQHFRKLLLLDDEAGPLEEELPRLADEGLNRRVAEDLNLG
NLNVSIPTWTHKVGNTGLYSSTVPVFNPFWKTPSFNPNIHLHQDIIKKCEQFVGPLTVN
EKRRQLQIMPARFYPKVTKYLPLDKGIKPYYPENLVNHYFQTRHYLHTLWKAGILYXR
ETTHSASPCGSPYSWEQDLHHGAESFHQQSSGILSRPPVGSLSQSKHRKSRLGLQSQQ
GHLARRQQGRSWSIRAGFHPHTARRPFGVEPSGSGHTTNFASKSASCLHQSPDRKAAYP
AVSTFEKHSSSGHAVEFHNLSPNSARSQSERPVFPWWLQFRSSKPCSDYCLSLIVNL
LEDWGPCEAHGENHIRTPTPTPSRVTTGGVFLVDKNPHNTAESRLVVDFFSQFSRGNRYVS
WPKFAVFNLSLTNLLSSNLSWLSLDVSAAFYHLPLHPAAMPHELLVGSSGLSRYIARL
SSNSRIILNHQGTMPNLDYCSNLYVSLLLLYQTFFGRKLHLYSHPIILGFRKIPMGV
GLSPFLLAQFTSAICSVVRRAPPHCLAFSYMDDVVLGAKSVQHLESLEFTAVTNFLLSL
GIHLNPNKTKRWGYSLNFMGYVIGSYGSLPQEHIIQKIKECFRKLPIINRPIDWKVCQR
IVGLLGFAPFTQCGYPALMPYACIQSKQAFTEFSPTYKAFCLKQYLNLYPVARQRPG
LCQVFADATPTGWGLVMGHQMRGTFSAPLPIHTAELLAACFARSRSGANIIGTDNSV
VLSRKYTSYPWLLGCAANWILRGTSFVYVPSALNPADDPGRRLGLSRPLRLRPFRT
TGRTSLYADSPSPVSHLPDRVHFASPLHVAVRPP"

The claims are submitted to be patentable over the cited art and withdrawal of the Section 102 rejection is requested.

BOZDAYI
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The claims are submitted to be in condition for allowance and a Notice to that effect is requested. The Examiner is requested to contact the undersigned, preferably by telephone, in the event anything further is required in this regard.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: /B. J. Sadoff/
 B. J. Sadoff
 Reg. No. 36,663

BJS:
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100